

Claims

1. Method for manufacturing a laminate (100) comprising the steps:
 - providing at least one continuous process foil (11)
 - 5 - depositing a continuous, substantially non-polymeric semi-manufactured product band (31) to the process foil (11)
 - sealing the semi-manufactured product band (31) with respect to the process foils (11)
 - depositing a hardenable synthetics (41) to the semi-manufactured product band (31)
 - 10 - hardening the synthetics, while providing a bonding between the synthetics and the semi-manufactured product.
2. Method according to claim 1, further comprising the step of depositing a second continuous process foil (21) on the hardenable synthetics.
- 15 3. Method according to claim 1 or 2, further comprising the step of introducing reinforcement material into the hardenable synthetics.
4. Method according to one of the preceding claims, further comprising the step of calendering by means of a calender (50), especially preferably immediately prior to the hardening step.
- 20 5. Method according to one of the preceding claims, wherein the space between the process foils (11, 21) and/or one process foil (11, 21) and the semi-manufactured product band (31) is evacuated.
- 25 6. Method according to one of the preceding claims, characterized in that at least one process foil (11, 21) protrudes laterally beyond the semi-manufactured product band (31) in order to allow for an engagement by transport means.
- 30 7. Method according to one of claims 2 to 6, characterized in that the process foils (11, 21) laterally alongside/beside the semi-manufactured product band (31) may be

engaged with one another, especially substantially in a sealing manner.

- 5 8. Method according to one of the preceding claims, characterized in that the semi-manufactured product band (31), is practically not permeable with respect to the hardenable synthetics.
9. Method according to one of the preceding claims, characterized in that the semi-manufactured product band (31) is a metal band, especially a coated metal band and/or a surface treated metal band.
- 10 10. Device for carrying out a method according to one of the preceding claims, comprising material storage(s) (10) for continuous dispensing of at least one process foil (11), a storage dispensing device (30) for continuous provision of a substantially non-polymeric semi-manufactured product band (31), a sealing device for sealing the semi-
- 15 manufactured product with respect to the process foil, as well as a device (40) for storing and dispensing of hardenable synthetics (41) in a continuous manner.
11. Device according to claim 10, comprising a further material storage (20) for continuously dispensing at least one process foil (21).
- 20 12. Device according to claim 10 or 11, wherein the sealing device for sealing the semi-manufactured product with respect to one of the process foils comprises a gluing tape dispensing facility having optimal impact means.
- 25 13. Device according to claim 10, 11 or 12, comprising a synthetics distributing facility (44) and/or a synthetics impact facility (50), especially in form of a spreading knife (44) and/or a calender (50).
- 30 14. Device according to claim 10, 11, 12, or 13, further comprising a facility (45) for storing and continuously dispensing of reinforcement material (46).

15. Device according to one of the claims 10 to 14, further comprising a heating device (60), especially a continuously feedable heating and tempering table.
16. Device according to one of the claims 10 to 15, further comprising a forwarding means, which may be engaged with at least one of the process foils (11, 21) alongside/beside the semi-manufactured product band (31).
17. Device according to claim 16, wherein the forwarding means are designed in such a way that a sealing engagement between two process foils (11, 21) is enabled.
18. Method for manufacturing a laminate (300), comprising the steps:
- providing a support surface (370) having predetermined dimensions
 - providing at least one optional first process foil (311)
 - depositing a substantially non-polymeric semi-manufactured product band (331) to the support surface or the optional process foil (311)
 - sealing the semi-manufactured product band (331) with respect to the support surface or the optional first process foil (311)
 - depositing a hardenable synthetics (341) to the semi-manufactured product band (331)
 - hardening the synthetics while depositing a bonding between the synthetics and the semi-manufactured product.
19. Method according to claim 18, further comprising the step of depositing a second process foil (321) to the hardenable synthetics.
20. Method according to claim 18 or 19, further comprising the step of introducing reinforcement material into the hardenable synthetics.
21. Method according to one of claims 18 to 20, wherein the space between the process foils (311, 321) and/or one process foil (311, 321) and the semi-manufactured product band (331) is evacuated.

22. Method according to one of claims 19 to 21, characterized in that the process foils (311, 321) may be engaged with each other laterally alongside/beside the semi-manufactured product band (331), especially in a substantially sealing manner.
- 5 23. Method according to one of claims 18 to 22, characterized in that the semi-manufactured product band (331) is practically impermeable with respect to the hardenable synthetics.
- 10 24. Method according to one of claims 18 to 23, wherein the semi-manufactured product band (331) is a metal band, especially a coated metal band and/or a surface treated metal band.
25. Method according to one of claims 18 to 24, further comprising the step of grinding the backside of the hardened synthetics.
- 15 26. Device for carrying-out a method according to one of the claims 18 to 25, comprising a support surface (370) having predetermined dimensions, an optional material storage (310) for dispensing at least one optional first process foil (311), a storage dispensing device (330) for providing a substantially non-polymeric semi-manufactured product band (331), a sealing device for sealing the semi-manufactured product with respect to the support surface or the optional process foil, as well as at least one laminating facility (340)), which may be moved relative to the support surface (370), for storing and dispensing of hardenable synthetics (341).
- 20 27. Device according to claim 26, comprising a further material storage (320) for dispensing at least one process foil (321).
- 25 28. Device according to claim 26 or 27, wherein the sealing device, in order to seal the semi-manufactured product with respect to one of the process foils, comprises a gluing tape dispensing device having optimal/optional impact means.
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29. Device according to one of claims 26 to 28, further comprising a laminating facility (345) for storing and dispensing reinforcement material (346).
- 5 30. Synthetics/metal laminate, which is manufactured according to one of claims 1 to 9 or 18 to 25 and/or by means of a device according to one of the claims 10 to 17 or 26 to 29, which especially does not show any deformation during ballistic impact with spheres having a diameter of 20 mm at a velocity of 20 m/s.